



**PATENT**  
Customer Number 22,852  
Attorney Docket No. 05725.0903-00000

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:	)	
	)	
<b>Shinichi YAMADA et al.</b>	)	Confirmation No.: 5364
	)	
Application No.: 09/857,495	)	Group Art Unit: 1617
	)	
Filed: June 28, 2001	)	Examiner: G. Yu
	)	
For: COSMETIC COMPOSITION	)	
COMPRISING AT LEAST A CATION,	)	
A LIQUID FATTY ALCOHOL AND AT	)	
LEAST A CERAMIDE TYPE	)	
COMPOUND AND METHOD USING	)	
SAME	)	

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Sir:

**APPEAL BRIEF UNDER BOARD RULE § 41.37**

In support of the Notice of Appeal filed November 23, 2005, and further to Board Rule 41.37, and the Notice of Panel Decision from Pre-Appeal Brief Review dated December 21, 2005, Appellants present this brief and enclose herewith a check for the fee of \$500.00 required under 37 C.F.R. § 1.17(c).

This Appeal Brief is being filed concurrently with a petition for an Extension of Time for five months, and the appropriate fee, extending the period for response to June 23, 2006.

This Appeal responds to the May 24, 2005, final rejection of claims 19-82.

If any additional fees are required or if the enclosed payment is insufficient,  
Appellants request that the required fees be charged to Deposit Account No. 06-0916.

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I. **Real Party In Interest**

L'Oreal, S.A. is the real party in interest. The assignment was recorded at Reel No. 012053 and Frame No. 0770 on June 28, 2001.

**II. Related Appeals and Interferences**

There are currently no other appeals or interferences, of which Appellants, Appellants' legal representative, or Assignee are aware, that will directly affect or be affected by or have a bearing on the Board's decision in the pending Appeal.

**III. Status of Claims**

Claims 19-82 are pending in the application. A complete listing of the pending claims is included in the attached appendix. No claims have been allowed.

**IV. Status of Amendments**

No claim amendments have been made in response or subsequent to the final Office Action dated May 24, 2005.



**V. Summary of Claimed Subject Matter**

The present application relates generally to cosmetic compositions for the treatment of keratinous materials, such as, e.g., hair, comprising at least one cation, at least one liquid fatty alcohol, and at least one ceramide compound, and to methods of nontherapeutic treatment using these compositions.

Ceramides and glycoceramides, in combination with cholesterol esters, have been used to treat damaged hair with the aim of protecting the hair fiber. Specification at p. 1, lines 21-24. The application of the latter compositions, or of the ceramides alone, to the hair nevertheless results in inadequate cosmetic performances, both on wet hair and on dry hair. Specification at p. 1, lines 24-27.

Liquid products generally apply better to the hair and become homogeneously distributed. Specification at p. 2, lines 5-9. However, it is difficult to obtain stable aqueous liquid compositions, containing water-insoluble compounds such as ceramide-type compounds. *Id.* Consequently, ceramides are generally formulated in thick compositions (cream or gel) containing thickeners with the aim of improving the stability and the suspension of the ceramides in aqueous compositions. *Id.* at p. 2, lines 1-4.

The present inventors have discovered that by using compositions containing at least one cationic surfactant and at least one liquid fatty alcohol in combination with at least one ceramide compound, stable liquid compositions can be obtained, which exhibit substantial improvement in cosmetic performances both on wet hair and on dry hair. Specification at p. 2, lines 10-16. For example, cosmetic properties such as the property of lending suppleness and sleekness to the fibers with no increase in weight or

with no greasy effect, of softness and of glossiness are superior to those of a composition containing a solid fatty alcohol generally used for improving the stability of compositions. Specification at p. 2, lines 17-26. Furthermore, the compositions do not require an exposure time. *Id.*

In one embodiment, the present application relates to cosmetic compositions comprising, in a cosmetically acceptable medium, at least one liquid fatty alcohol, at least one ceramide compound, and at least one cationic surfactant, wherein the at least one fatty liquid alcohol contains no more than one hydroxyl group. Specification at p. 3, lines 1-5, and page 8, lines 24-28.

In another embodiment, the present application relates to a method of making a composition to be applied to the hair, comprising combining, in a cosmetically acceptable aqueous medium, at least one liquid fatty alcohol, at least one ceramide compound, and at least one cationic surfactant, wherein the at least one fatty liquid alcohol contains no more than one hydroxyl group. Specification at p. 3, lines 1-5, and page 8, lines 24-28.

Yet another embodiment relates to a method for treating keratinous materials, comprising applying at least one composition to said keratinous materials, and then optionally rinsing with water, wherein said at least one composition comprises, in a cosmetically acceptable aqueous medium, at least one liquid fatty alcohol, at least one ceramide compound, and at least one cationic surfactant, wherein the at least one fatty liquid alcohol contains no more than one hydroxyl group. Specification at p. 3, lines 1-5, page 8, lines 24-28, and page 16, lines 9-14.

A further embodiment relates to a method of protecting keratinous materials from physical or chemical attacks, comprising applying at least one composition to said keratinous materials, wherein said at least one composition comprises, in a cosmetically acceptable aqueous medium, at least one liquid fatty alcohol, at least one ceramide compound at least one cationic surfactant, wherein the at least one fatty liquid alcohol contains no more than one hydroxyl group. Specification at p. 3, lines 1-9, and page 8, lines 24-28.

Yet another embodiment relates to a liquid cosmetic composition comprising, in a cosmetically acceptable aqueous medium, at least one liquid fatty alcohol, at least one ceramide compound, and at least one cationic surfactant, wherein the at least one liquid fatty alcohol is present in an amount ranging from 1.5% to 10% by weight of the total composition. Specification at p. 3, lines 1-5, and page 9, lines 3-5.

Thus, the present invention relates to cosmetic compositions comprising at least one liquid fatty alcohol, at least one ceramide compound, and at least one cationic surfactant, and to methods of nontherapeutic treatment using these compositions. The independent claims on appeal (19, 57, 64, 74, and 82) recite the common feature of (1) at least one liquid fatty alcohol, (2) at least one ceramide compound, and (3) at least one cationic surfactant. See, e.g., claim 19.

**VI. Grounds of Rejection**

I. Claims 19, 20, 27-33, 52-54, 56-58, 61, 64-66, 69, 72-76, 79, and 82 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,110,450 to Bergmann ("*Bergmann*") in view of U.S. Patent No. 5,198,210 to Critchley et al. ("*Critchley*").

II. Claims 21-26, 34, 59, 60, 67, 68, and 77-78 stand rejected under 35 U.S.C. § 103(a) as unpatentable over *Bergmann* in view of *Critchley*, and further in view of U.S. Patent No. 6,312,674 to Maubru et al. ("*Maubru*").

III. Claims 35-51, 62, 63, 70, 71, 80, and 81 stand rejected under 35 U.S.C. § 103(a) as unpatentable over *Bergmann* in view of *Critchley* and *Maubru*, and further in view of U.S. Patent No. 6,120,757 to Dubief et al. ("*Dubief*").

IV. Claims 35-51, 55, 62, 63, 70, 71, 80, and 81 stand rejected under 35 U.S.C. § 103(a) as unpatentable over *Bergmann* and *Critchley* in view of U.S. Patent No. 5,587,155 to Ochiai et al. ("*Ochiai*").

**VII. Argument**

Each claim of the present application is separately patentable, and upon issuance of a patent will be entitled to a separate presumption of validity under 35 U.S.C. § 282. The arguments set forth below are arranged under separate subheadings, and in accordance with 37 C.F.R. § 41.37(c)(1)(vii) these subheadings indicate the claims that are argued separately.

Several basic factual inquiries must be made in order to determine the obviousness or non-obviousness of claims of a patent application under 35 U.S.C. § 103. These factual inquiries, set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), require the Examiner to:

- (1) Determine the scope and content of the prior art;
- (2) Ascertain the differences between the prior art and the claims in issue;
- (3) Resolve the level of ordinary skill in the pertinent art; and
- (4) Evaluate evidence of secondary considerations.

The obviousness or nonobviousness of the claimed invention is then evaluated in view of the results of these inquiries. *Graham*, 383 U.S. at 17-18, 148 USPQ 467.

Thus, in order to carry the initial burden of establishing a prima facie case of obviousness that satisfies the *Graham* standard, the Examiner must show that the prior art references must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). The Examiner must also show that there is some suggestion or motivation, either in the references relied upon by the Examiner or in the knowledge generally available to one of ordinary skill in the art, to modify and/or

combine the references. *In re Rouffet*, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998). In addition, the suggestion or motivation “must be found in the prior art reference, not in the Applicant’s disclosure.” *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991).

The threshold for establishing a motivation or suggestion to modify a prior art reference is high. The Federal Circuit has clearly stated that the evidence of a motivation or suggestion to modify a reference must be “clear and particular.” *In re Dembicziak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Further, the Examiner can satisfy the burden of establishing a prima facie case of obviousness “only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) (citations omitted) (emphasis added). The Federal Circuit has reaffirmed the Examiner’s high burden to establish a prima facie case of obviousness and has emphasized the requirement of specificity. See *Kotzab*, 217 F.3d at 1370, 55 USPQ2d, at 1317; see also *In re Sang-Su Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002).

In the present case, a prima facie case of obviousness was not established at least because the Examiner failed to provide evidence showing a motivation or suggestion to combine the prior art, such as the combination of *Bergmann* and *Critchley*, in the manner suggested by the Examiner. Additionally, with respect to independent claims 19 and 82, and all claims dependent thereon, a prima facie case of

obviousness was not established at least because the Examiner's proposed combination of *Bergmann* and *Critchley* fail to teach or suggest all the claim limitations.

**A. Claims 19, 20, 27-33, 52-54, 56-58, 61, 64-66, 69, 72-76, 79, and 82 are patentable over Bergmann in view of Critchley based on lack of motivation to combine**

The Examiner rejected claims 19, 20, 27-33, 52-54, 56-58, 61, 64-66, 69, 72-76, 79, and 82 as prima facie obvious under 35 U.S.C. § 103(a) over *Bergmann* in view of *Critchley*. Final Office Action at p. 2. *Bergmann* relates to hair care compositions comprising at least one ceramide and/or glycosphingolipid and phytantriol. The Examiner asserts that "Example 2 [which describes a hair conditioner composition] shows an aqueous formulation comprising oleoyldihydrosphingosine, cationic surfactants (components 1 and 4) and additives [stearyl alcohol and cetyl alcohol]." *Id.* Notably, the Examiner acknowledges that *Bergmann* "fails to teach liquid fatty alcohols having one hydroxyl group." *Id.* at p. 3.

*Critchley* relates to particular pseudoceramides, their synthesis, and their use in cosmetic compositions. The Examiner alleges that "Critchley teaches cosmetic compositions for skin, hair and nails which contains [sic] synthetic ceramides and emollients such as isocetyl alcohol, stearyl alcohol and cetyl alcohol." Final Office Action at p. 3. The Examiner further alleges that *Critchley* "suggests the equivalence of these alcohols which are well known emollients in the art." *Id.* The Examiner argues that "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the compositions of Bergmann by substituting the stearyl alcohol and cetyl alcohol with isocetyl alcohol, as motivated by Critchley." *Id.*

**(i) The motivation expressly set forth by the Examiner for the combination of *Bergmann* and *Critchley* is factually inaccurate.**

The Examiner argues that one of ordinary skill in the art would have been motivated to substitute a liquid fatty alcohol listed by *Critchley* for a solid fatty alcohol in the hair conditioner composition (Example 2) of *Bergmann* because:

- 1) all references are directed to hair care compositions;
- 2) *Critchley* teaches the use of isocetyl alcohol with ceramides; and
- 3) *Critchley* teaches the equivalence of isocetyl alcohol with those fatty alcohols used in *Bergmann*.

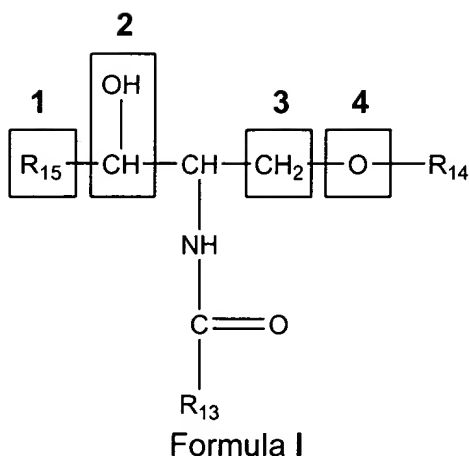
Final Office Action at p. 3. Appellants respectfully disagree with the Examiner's proposed motivation at least because assertions 2) and 3) set forth above are factually inaccurate.

**a. *Critchley* does not teach the use of isocetyl alcohol with ceramides.**

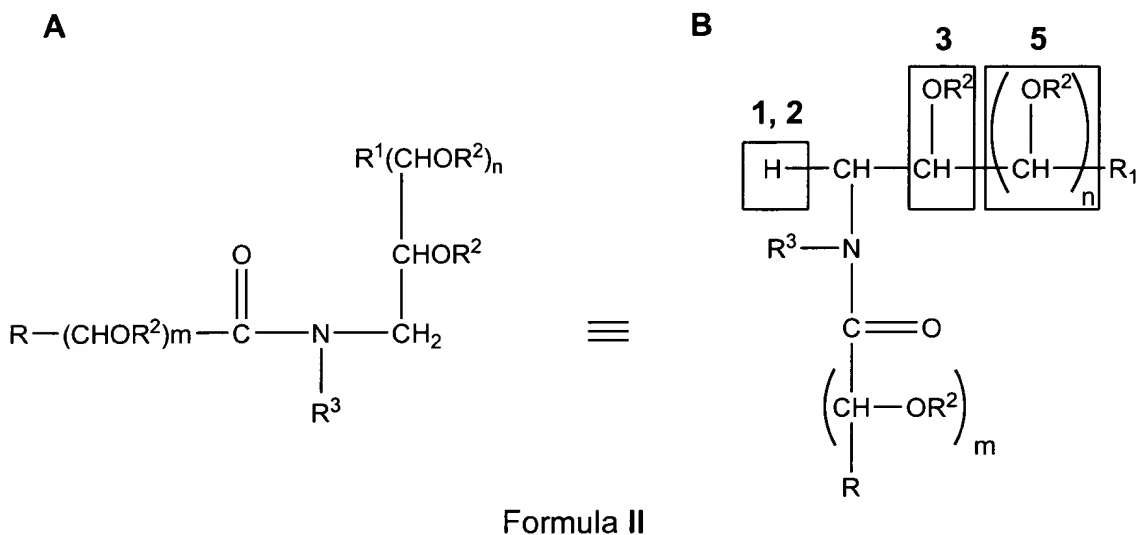
The Examiner alleges that "*Critchley* teaches the use of isocetyl alcohol with ceramides." Final Office Action at p. 3. Appellants respectfully disagree and submit that *Critchley* does not teach the use of ceramides at all. Rather, *Critchley* teaches the use of pseudoceramides, which, as highlighted below, are chemically distinct from the ceramides of *Bergmann*.

For the Examiner's convenience, the chemical structure of the *Bergmann* ceramides is depicted in Formula I.



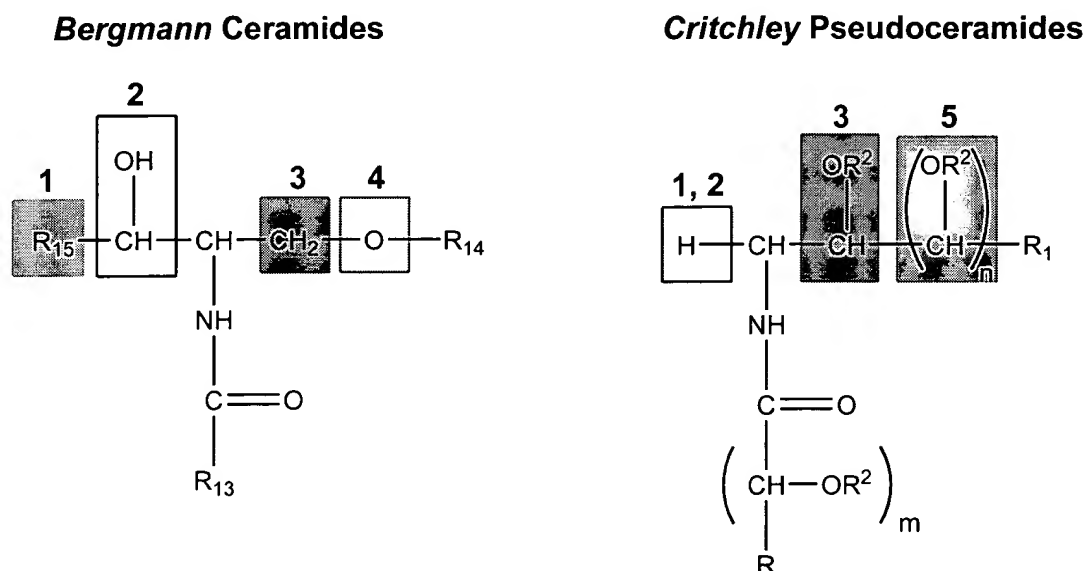


The chemical structure of the pseudoceramides of *Critchley* (depicted for the Examiner's convenience in Formula II below) is distinct from the chemical structure of the ceramides taught by *Bergmann*. In Figure IIA, the *Critchley* pseudoceramides are depicted as drawn in *Critchley*, whereas in Figure IIB the *Critchley* pseudoceramides are redrawn for ease of comparison with the ceramides of *Bergmann*.



A side-by-side comparison of the two compounds show that there are at least five key differences between the ceramides taught by *Bergmann* (Formula I) and the

pseudoceramides taught by *Critchley* (Formula IIB). These differences, labeled in the figures above, are again highlighted below.



The ceramides taught by *Bergmann* contain four unique chemical groups relative to the pseudoceramides taught by *Critchley*: (1)  $R_{15}$ , a  $C_{15}$ - $C_{26}$  hydrocarbon radical, (2) a hydroxyl-substituted methine group, (3) a methylene group, and (4) an ether or hydroxyl group. The pseudoceramides taught by *Critchley* contain three unique chemical groups relative to the ceramides taught by *Bergmann*: (1,2) a hydrogen radical, (3) a hydroxyl-, sugar-, sulfate-, or phosphate-substituted methine group, and (5) an optional hydroxyl-, sugar-, sulfate-, or phosphate-substituted methine group.

Moreover, *Critchley* teaches that the number of hydroxyl groups in the pseudoceramides taught therein "is highly relevant to its influence on the water barrier properties." *Critchley* at col. 1, lines 55-58. Indeed, the core structure of the *Critchley* pseudoceramides has at least one additional hydroxyl (or etherified hydroxyl) than the

core structure of the *Bergmann* ceramides (three, rather than two). For at least these reasons, a skilled artisan would conclude from the teachings of *Critchley* that the *Critchley* pseudoceramides and the *Bergmann* ceramides represent two families of compounds, and are thus distinct from one another.

Accordingly, Appellants respectfully submit that because *Critchley* does not teach ceramides as used in *Bergmann*, the Examiner cannot simply conclude that *Critchley* teaches the use of isocetyl alcohol with ceramides. For at least this reason, the motivation set forth by the Examiner for the combination of *Bergmann* and *Critchley* is flawed.

**b. *Critchley* does not teach the equivalence of isocetyl alcohol with those fatty alcohols used in *Bergmann*.**

The Examiner also alleges that “*Critchley* teaches the equivalence of isocetyl alcohol with those fatty alcohols used in *Bergmann*.” Final Office Action at p. 3. That is simply not the case.

*Bergmann* teaches that a “fatty alcohol such as cetyl alcohol” (*Bergmann* at col. 3, lines 8-9) may be present as an optional conditioning agent. *Bergmann* at col. 6, lines 58-62. There is no teaching in *Critchley* that fatty alcohols may be used as conditioning agents. Furthermore, there is no teaching in *Critchley* that solid fatty alcohols such as cetyl alcohol and stearyl alcohol and liquid fatty alcohols such as isocetyl alcohol may be used interchangeably as conditioning agents.

By contrast, *Critchley* teaches that cetyl alcohol and stearyl alcohol are examples of emollients that may be used as cosmetically acceptable “[v]ehicles other than water.”

*Critchley* at col. 10, line 39. The Examiner's broad conclusory statement regarding the alleged equivalence between isocetyl alcohol and other fatty alcohols can possibly be plausible **only** with respect to the use of these fatty alcohols as a "cosmetically acceptable vehicle to act as a dilutant, dispersant, or carrier" in combination with pseudoceramides. *Critchley* at col. 10, lines 26-27. The Examiner has failed to demonstrate any other similarity between these cosmetically acceptable vehicles. Finally, there is no teaching in *Bergmann* that a fatty alcohol may be used as a cosmetically acceptable vehicle; instead, *Bergmann* teaches that "[t]he compositions of the invention are preferably aqueous." *Bergmann* at col. 7, line 33.

Appellants thus respectfully submit that the Examiner cannot conclude that *Critchley* teaches the equivalence of isocetyl alcohol with those fatty alcohols used in *Bergmann*. The motivation set forth by the Examiner for the combination of *Bergmann* and *Critchley* is flawed for this additional reason.

**(ii) The Examiner has shown no suggestion or motivation to choose isocetyl alcohol from the cosmetically acceptable vehicles recited in *Critchley*.**

*Critchley* provides fifty-seven examples of emollients that may be used as cosmetically acceptable "[v]ehicles other than water." *Critchley* at col. 10, line 39. The cosmetically acceptable vehicles recited by *Critchley* are chemically diverse, including vegetable oils such as avocado oil; animal fats such as tallow; petroleum products such as petroleum jelly; silicone oils; polymers such as polyethylene glycol; esters such as butyl stearate; solid fatty alcohols such as cetyl alcohol and stearyl alcohol; and the liquid fatty alcohol isocetyl alcohol. The list provided by *Critchley* reads:

stearyl alcohol, glyceryl monoricinoleate, glyceryl monostearate, mink oil, cetyl alcohol, isopropyl isostearate, stearic acid, isobutyl palmitate, isocetyl stearate, oleyl alcohol, isopropyl laurate, hexyl laurate, decyl oleate, octadecan-2-ol, isocetyl alcohol, eicosanyl alcohol, behenyl alcohol, cetyl palmitate, silicone oils such as dimethylpolysiloxane, di-n-butyl sebacate, isopropyl myristate, isopropyl palmitate, isopropyl stearate, butyl stearate, polyethylene glycol, triethylene glycol, lanolin, cocoa butter, corn oil, cotton seed oil, tallow, lard, olive oil, palm kernel oil, rapeseed oil, safflower seed oil, evening primrose oil, soybean oil, sunflower seed oil, avocado oil, olive oil, sesame seed oil, coconut oil, arachis oil, castor oil, acetylated lanolin alcohols, petroleum jelly, mineral oil, butyl myristate, isostearic acid, palmitic acid, isopropyl linoleate, lauryl lactate, myristyl lactate, decyl oleate, [and] myristyl myristate.

*Critchley* at col. 10, lines 44-61. In presenting a prima facie case of obviousness, the Examiner must present a convincing line of reasoning as to why one of ordinary skill in the art would pick and choose various elements and/or concepts from the prior art to arrive at the claimed invention. *Ex parte Clapp*, 227 USPQ 972 (Bd. Pat. App. & Inter. 1985); *In re Wesslau*, 147 USPQ 391 (Bd. Pat. App. & Inter. 1965). Again, “only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to [modify or] combine the relevant teachings of the references.” *In re Fine*, 837 F.2d at 1074, 5 USPQ2d at 1598.

Based on the lack of guidance in *Critchley*, were a skilled artisan to attempt to select an emollient “equivalent” to a cetyl alcohol or stearyl alcohol, which are both solid fatty alcohols, from *Critchley*’s list of fifty-seven emollients, it is unlikely that that skilled artisan would seek to replace a solid compound with a liquid compound, absent the

teachings of the presently claimed invention. The Examiner has simply failed to point to any teaching in the prior art that would have led to such a selection, and Appellants submit that such a teaching fails to exist in the prior art relied upon by the Examiner. At best, the Examiner the prior art discloses compounds within a large and disparate genus that would be, *arguendo*, obvious to try. Nevertheless, "obvious to try" is not the standard for an obviousness rejection. *In re O'Farrell*, 853 F.2d 894, 903, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988).

Appellants respectfully submit that the Examiner has failed to provide an adequate line of reasoning to motivate the choice of isocetyl alcohol from *Critchley's* diverse disclosure, and as a result, has failed to establish a prima facie case of obviousness pursuant to 35 U.S.C. § 103(a) for this additional reason.

**(iii) The combination of *Bergmann* and *Critchley* would not have provided one of ordinary skill with a reasonable expectation of success in making the claimed invention.**

As highlighted above, there are at least five key differences between the ceramides taught by *Bergmann* (Formula I) and the pseudoceramides taught by *Critchley* (Formula IIB). One of ordinary skill in the art would have had no reasonable expectation of success in combining the teachings of *Bergmann* and *Critchley*, at least because of the lack of a structural similarity between the *Bergmann* ceramides and the *Critchley* pseudoceramides. Rather, Applicants respectfully submit that because of the numerous differences between the *Bergmann* ceramides and the *Critchley* pseudoceramides, the skilled artisan would have been led to conclude that the two families of compounds had distinct chemical, physical, and cosmetic properties.

Based on the numerous differences between the ceramides taught by *Bergmann* (Formula I) and the pseudoceramides taught by *Critchley* (Formula IIB), the Examiner has failed to demonstrate that a skilled artisan would have a reasonable expectation of success in combining the two references in an attempt to arrive at the claimed invention. For at least this additional reason, the Examiner has failed to set forth a proper prima facie case of obviousness.

**B. Claims 19, 20, 27-33, 52-54, 56 and 82 are patentable over *Bergmann* in view of *Critchley* based on failure to teach or suggest all claim limitations**

Independent claims 19 and 82 each recite liquid cosmetic compositions. These liquid cosmetic compositions are expressly defined in the specification as being "understood to mean compositions having a viscosity of less than or equal to 1,000 cpoises (1 Pa.s)." Specification, page 3, lines 13-18.

In contrast, *Bergmann* and *Critchley* neither teach nor suggest a liquid cosmetic composition. In fact, *Bergmann* teaches a shampoo having a viscosity between 4,000 and 7,000 cps. See *Bergmann*, at column 8, lines 42-43. And *Critchley* explicitly excludes liquid compositions. The compositions taught by *Critchley* "can be formulated as a lotion having a viscosity of from 4,000 to 10,000 mPas, a fluid cream having a viscosity of from 10,000 to 20,000 mPas or a cream having a viscosity of from 20,000 to 100,000 mPas, or above." *Critchley*, at column 17, lines 21-26.

The Examiner has pointed to nothing in either reference that teaches or suggests of a liquid composition having a viscosity of less than or equal to 1,000 cpoises (1 Pa.s). Appellants submit no such teaching exists in *Bergmann* and *Critchley*, and the

references actually disclose compositions outside the scope of the liquid cosmetic compositions as recited in independent claims 19 and 82.

**C. Claims 21-26, 34, 59, 60, 67, 68, 77, and 78 are patentable over *Bergmann* in view of *Critchley*, and further in view of *Maubru* based on lack of motivation to combine**

The Examiner rejected claims 21-26, 34, 59, 60, 67, 68, 77, and 78 under 35 U.S.C. § 103(a) as being obvious over *Bergmann* in view of *Critchley*, and further in view of *Maubru*. Final Office Action at pp. 3-5. The Examiner acknowledges that “*Bergmann* and *Critchley* fail to teach the specific ceramides of the instant claims.” *Id.* at p. 4. In an attempt to make up for these deficiencies, *Maubru* is cited for the ceramides disclosed therein and their use in hair cosmetic compositions. *Id.* The Examiner states that it would have been obvious to modify “the compositions of the combined references by adding the ceramides of *Maubru* . . . because 1) both *Bergman* and *Maubru* teach using ceramides in oxidizing bleaching or permanently reshaping composition.” *Id.* at pp. 4-5 (emphasis added). Appellants disagree.

Appellants submit that the Examiner has failed to set forth a prima facie case of obviousness at least for the reason that *Maubru* does not make up for the deficiencies in the combination of *Bergmann* and *Critchley* highlighted above. Specifically, Appellants submit that *Maubru* fails to cure the lack of motivation and reasonable expectation of success in combining the teachings of *Bergmann* and *Critchley*, at least because of the lack of a structural similarity between the ceramides taught by *Bergmann* (Formula I) and the pseudoceramides taught by *Critchley* (Formula IIB).



Moreover, the Examiner has failed to point to why one of ordinary skill in the art would have combined the teachings of *Maubru* with both *Bergmann* and *Critchley*, which would be required to obtain “the compositions of the combined references” as alleged by the Examiner. In fact, the Examiner has provided no reasoning why one of ordinary skill in the art would combine *Maubru* with *Critchley*. See Final Office Action at pp. 4-5.

As emphasized above, the Examiner can satisfy the burden of establishing a prima facie case of obviousness “only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” *In re Fine*, 837 F.2d at 1074, 5 U.S.P.Q.2d at 1598 (emphasis added). Moreover, establishing a prima facie case of obviousness requires specificity. See *Kotzab*, 217 F.3d at 1370, 55 U.S.P.Q.2d at 1317.

In the present case, no such objective teaching has even been alleged by the Examiner with respect to the combination of *Maubru* with *Critchley*. The rejection of record is simply silent with respect to this combination, which is necessary for the Examiner to arrive at “the compositions of the combined references,” which are then modified by *Maubru* in the manner suggested by the Examiner. Accordingly, Appellants submit the Examiner has failed to establish a prima facie case for this additional reason.

**D. Claims 35-51, 62, 63, 70, 71, 80, and 81 are patentable over *Bergmann* in view of *Critchley* and *Maubru*, and further in view of *Dubief*.**

The Examiner rejected claims 35-51, 62, 63, 70, 71, 80, and 81 under 35 U.S.C. § 103(a) as being obvious over *Bergmann* in view of *Critchley* and *Maubru*, and further in view of *Dubief*. Final Office Action at pp. 5-6. The Examiner acknowledges that the “combined references [*Bergmann* in view of *Critchley* and *Maubru*] fail to teach the specific cationic surfactants of the instant claims.” *Id.* at p. 5. The Examiner attempts to rely on *Dubief* to make up for this deficiency.

*Dubief* relates to “a composition in the form of an aqueous dispersion, characterized in that it comprises, in a cosmetically acceptable medium, at least one liposoluble agent for screening out ultraviolet radiation, of the organosiloxane type containing a benzalmonate function and at least one water-insoluble cationic surfactant.” *Dubief* teaches ultraviolet-screening, e.g., sun-screening, compositions for keratin fibers such as the hair.

Appellants submit that the Examiner has failed to set forth a prima facie case of obviousness at least for the reason that *Dubief* does not make up for the deficiencies in the combination of *Bergmann* and *Critchley*, or the combination of *Bergmann*, *Critchley*, and *Maubru*, highlighted above. Additionally, Appellants submit that the Examiner’s arguments in this rejection are inconsistent with the teachings of the references relied upon by the Examiner.

The Examiner alleges that “*Dubief* teaches aqueous dispersion containing quaternary ammonium surfactants, which is useful for hair cosmetic compositions.” Final Office Action at p. 5. The Examiner further alleges that “[i]t is generally considered

prima facie obvious to combine two compounds each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is to be used for the very same purpose,” citing *In re Kerkhoven*, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980) for support. *Id.* at pp. 5-6.

Appellants respectfully submit that the Examiner has not shown that any of these compositions or compounds are “useful for the very same purpose.” Example 2 of *Bergmann*, which is relied upon by the Examiner in the rejections of record, relates to a hair conditioner composition, *Critchley* relates to compositions “intended primarily as a product for topical application to human skin” (*Critchley*, column 14, lines 41-43), *Maubru* relates to oxidizing cosmetic compositions for the hair, and *Dubief* relates to ultraviolet-screening, e.g., sun-screening, compositions for the hair. These compounds are thus not “useful for the very same purpose,” as alleged by the Examiner.

Moreover, Appellants submit that the Office’s reliance on *Kerkhoven* is misplaced, and does not support the Office’s position. The facts and holding of *Kerkhoven* involve combining “two compositions each of which is taught by the prior art to be useful for the same purpose.” *In re Kerkhoven*, 626 F.2d at 850, 205 USPQ at 1072 (emphasis added). In contrast to *Kerkhoven*, however, the Examiner in the present case is not combining compositions; rather, the Examiner is simply picking and choosing individual components from isolated disclosures in the cited references, such as an alcohol from *Critchley*, a surfactant from *Dubief*, and a specific ceramides from *Maubru*. This fictional combination made by the Examiner in the rejection is not a combination of compositions and therefore *Kerkhoven* is misapplied.

In view of the above argumentation, Appellants respectfully submit that the Examiner has identified no evidence of a teaching, suggestion, or motivation to combine *Bergmann*, *Critchley*, and *Maubru*, and *Dubief*. As the Examiner has failed to set forth a prima facie case of obviousness, Appellants respectfully request reconsideration and withdrawal of the rejection.

**E. Claims 35-51, 55, 62, 63, 70, 71, 80, and 81 are patentable over *Bergmann* in view of *Critchley*, and further in view of *Ochiai*.**

The Examiner rejected claims 35-51, 55, 62, 63, 70, 71, 80, and 81 under 35 U.S.C. § 103(a) as being obvious over *Bergmann* in view of *Critchley*, and further in view of *Ochiai*. Final Office Action at p. 6. *Ochiai* is cited for the quaternary ammonium cationic surfactants and 18-methyleicosanoic acid disclosed therein and their use in hair cosmetic compositions. Appellants respectfully traverse this rejection.

Appellants submit that the Examiner has failed to set forth a prima facie case of obviousness at least for the reason that *Ochiai* fails to make up for the deficiencies in the combination of *Bergmann* and *Critchley* highlighted above. Specifically, Appellants submit that *Ochiai* fails to cure the lack of motivation and reasonable expectation of success in combining the teachings of *Bergmann* and *Critchley*, at least because of the lack of a structural similarity between the ceramides taught by *Bergmann* (Formula I) and the pseudoceramides taught by *Critchley* (Formula IIB).

Moreover, the Examiner has failed to point to why one of ordinary skill in the art would have combined the teachings of *Ochiai* with both *Bergmann* and *Critchley*. *Ochiai* teaches hair cosmetic compositions comprising at least one fatty acid, fatty acid

salt, or fatty acid ester, at least one aromatic alcohol, and at least one cationic surfactant. *Ochiai* teaches that the aromatic alcohol must be present in the hair cosmetic composition in a proportion of at least 0.1% by disclosing that “[a]ny proportions lower than 0.1% [of the aromatic alcohol] result in a composition which fails to achieve the effects of the present invention.” *Ochiai*, column 3, lines 19-21.

The compositions of *Bergmann* and *Critchley* do not contain aromatic alcohols. Therefore *Ochiai*, which requires such an aromatic alcohol, teaches away from combination with either *Bergmann* or *Critchley*, let alone both these references. The Examiner has therefore failed to provide the objective teaching for the combination of *Ochiai* with *Bergmann* and *Critchley*, as required by the holdings in *In re Fine* and *Kotzab*. Accordingly, Appellants submit the Examiner has failed to establish a prima facie case for this reason.

**VIII. Conclusion**

For the reasons given above, pending claims 19-82 are allowable and reversal of the Examiner's rejection is respectfully requested.

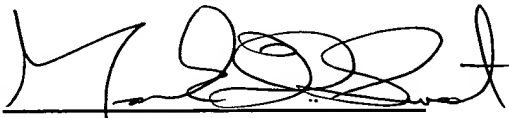
To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this Appeal Brief, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Date: June 22, 2006

By:

A handwritten signature in black ink, appearing to read 'M. Sweet', written over a horizontal line.

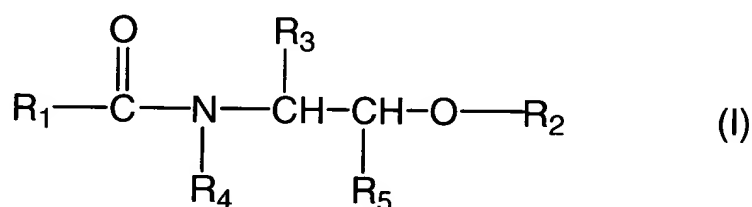
Mark D. Sweet  
Reg. No. 41,469

**IX. Claims Appendix to Appeal Brief Under Rule 41.37(c)(1)(viii)**

1-18 (Canceled)

19. (Previously Presented) A liquid cosmetic composition, comprising, in a cosmetically acceptable aqueous medium, at least one liquid fatty alcohol, at least one ceramide compound and at least one cationic surfactant, wherein the at least one fatty liquid alcohol contains no more than one hydroxyl group.

20. (Previously Presented) The composition according to claim 19, wherein said at least one ceramide compound is of formula (I):



wherein:

- R<sub>1</sub> is chosen from:

- a saturated or unsaturated, linear or branched, C<sub>1</sub>-C<sub>50</sub> hydrocarbon group, wherein said C<sub>1</sub>-C<sub>50</sub> hydrocarbon group is optionally substituted with at least one hydroxyl group, wherein said hydroxyl group is optionally esterified by an acid R<sub>7</sub>COOH, R<sub>7</sub> being chosen from a linear or branched, saturated or unsaturated, C<sub>1</sub>-C<sub>35</sub> hydrocarbon group, wherein said C<sub>1</sub>-C<sub>35</sub> hydrocarbon group of R<sub>7</sub> is optionally substituted with at least one hydroxyl group that is optionally esterified by a linear or branched, saturated or unsaturated, C<sub>1</sub>-C<sub>35</sub> fatty acid, wherein said C<sub>1</sub>-C<sub>35</sub> fatty acid is optionally substituted with at least one hydroxyl group;

- a group  $R''-(NR-CO)-R'$ , wherein R is chosen from hydrogen and a  $C_1$ - $C_{20}$  hydrocarbon group substituted with at least one hydroxyl group, and wherein  $R'$  and  $R''$  are chosen from hydrocarbon groups, wherein the sum of the carbon atoms in  $R'$  and  $R''$  ranges from 9 to 30, and wherein  $R'$  is a divalent radical; and

- a group  $R_8-O-CO-(CH_2)_p$ , wherein  $R_8$  is a  $C_1$ - $C_{20}$  hydrocarbon group, and p is an integer ranging from 1 to 12;

-  $R_2$  is chosen from hydrogen, a saccharide group, a sulfate residue, a phosphate residue, a phosphorylethylamine group and a phosphorylethylammonium group;

-  $R_3$  is chosen from hydrogen and a saturated or unsaturated, linear or branched,  $C_2$ - $C_{33}$  hydrocarbon group, wherein said  $C_1$ - $C_{33}$  hydrocarbon group is optionally substituted with at least one hydroxyl group, wherein said hydroxyl group is

- optionally esterified by an acid chosen from an inorganic acid and an acid  $R_7COOH$ , wherein  $R_7$  has the same meaning as above, or

- optionally etherified by a group chosen from a (glycosyl) $_n$  group, a (galactosyl) $_m$  group, a sulfogalactosyl group, a phosphorylethylamine group and a phosphorylethylammonium group, wherein n is an integer ranging from 1 to 4 and m is an integer ranging from 1 to 8 ,

and wherein  $R_3$  is optionally substituted with at least one  $C_1$ - $C_{14}$  alkyl group;

-  $R_4$  is chosen from hydrogen, a methyl group, an ethyl group, an optionally hydroxylated, linear or branched, saturated or unsaturated,  $C_3$ - $C_{50}$  hydrocarbon group, a group  $-CH_2-CHOH-CH_2-O-R_6$ , wherein  $R_6$  is chosen from a  $C_{10}$ - $C_{26}$  hydrocarbon group and a group  $R_8-O-CO-(CH_2)_p$ , wherein  $R_8$  is a  $C_1$ - $C_{20}$  hydrocarbon group, and p is an integer ranging from 1 to 12;

-  $R_5$  is chosen from hydrogen and a saturated or unsaturated, linear or branched,  $C_1$ - $C_{33}$  hydrocarbon group optionally substituted with at least one hydroxyl group,



wherein said hydroxyl group is optionally etherified by a group chosen from a (glycosyl)<sub>n</sub> group, a (galactosyl)<sub>m</sub> group, a sulfogalactosyl group, a phosphorylethylamine group, and a phosphorylethylammonium group, wherein m and n have the same meanings as above; and

with the proviso that when R<sub>3</sub> and R<sub>5</sub> are each hydrogen or when R<sub>3</sub> is hydrogen and R<sub>5</sub> is a methyl group, then R<sub>4</sub> is not chosen from hydrogen, a methyl group, and an ethyl group.

21. (Previously Presented) The composition according to claim 20, wherein R<sub>1</sub> is a saturated or unsaturated, linear or branched, C<sub>5</sub>-C<sub>50</sub> hydrocarbon group.

22. (Previously Presented) The composition according to claim 20, wherein R in group R''-(NR-CO)-R', is a monohydroxylated C<sub>1</sub>-C<sub>20</sub> hydrocarbon group.

23. (Previously Presented) The composition according to claim 20, wherein R<sub>2</sub> is a saccharide group chosen from a (glycosyl)<sub>n</sub> group, a (galactosyl)<sub>m</sub> group and a sulfogalactosyl group, wherein n is an integer ranging from 1 to 4 and m is an integer ranging from 1 to 8.

24. (Previously Presented) The composition according to claim 20, wherein R<sub>3</sub> is a C<sub>15</sub>-C<sub>26</sub> α-hydroxyalkyl group, wherein the α-hydroxyl group of said α-hydroxyalkyl is optionally esterified by a C<sub>16</sub>-C<sub>30</sub> α-hydroxy acid.

25. (Previously Presented) The composition according to claim 19, wherein said at least one ceramide compound is chosen from:

- 2-(N-linoleoylamino)-1,3-octadecanediol,
- 2-(N-oleoylamino)-1,3-octadecanediol,
- 2-(N-palmitoylamino)-1,3-octadecanediol,
- 2-(N-stearoylamino)-1,3-octadecanediol,
- 2-(N-behenoylamino)-1,3-octadecanediol,
- 2-[N-(2-hydroxypalmitoyl)amino]-1,3-octadecanediol,
- 2-(N-stearoylamino)-1,3,4-octadecanetriol, and
- 2-(N-palmitoylamino)-1,3-hexadecanediol.

26. (Previously Presented) The composition according to claim 19, wherein said at least one ceramide compound is chosen from bis(N-hydroxyethyl-N-cetyl)malonamide, N-(2-hydroxyethyl)-N-(3-cetyloxy-2-hydroxypropyl)amide of cetylic acid and N-docosanoyl-N-methyl-D-glucamine.

27. (Previously Presented) The composition according to claim 19, wherein said at least one ceramide compound is present in a concentration ranging from 0.0001% to 20% by weight, relative to the total weight of the composition.

28. (Previously Presented) The composition according to claim 27, wherein said at least one ceramide compound is present in a concentration ranging from 0.001% to 10% by weight, relative to the total weight of the composition.

29. (Previously Presented) The composition according to claim 28, wherein said at least one ceramide compound is present in a concentration ranging from 0.005% to 3% by weight, relative to the total weight of the composition.

30. (Previously Presented) The composition according to claim 19, wherein said at least one liquid fatty alcohol is chosen from lauryl alcohol, isomyristyl alcohol, isostearyl alcohol, isocetyl alcohol, isoarachidyl alcohol, 2-octyldodecanol, 2-butyloctanol and oleyl alcohol.

31. (Previously Presented) The composition according to claim 30, wherein said at least one fatty alcohol is chosen from isostearyl alcohol and isocetyl alcohol.

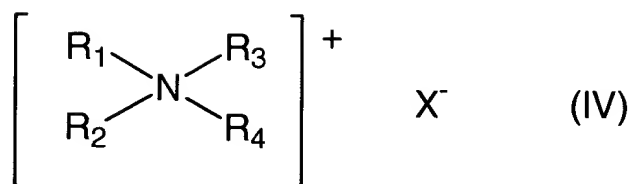
32. (Previously Presented) The composition according to claim 19, wherein said at least one liquid fatty alcohol is present in a concentration ranging from 0.5% to 10% by weight, relative to the approximate total weight of the composition.

33. (Previously Presented) The composition according to claim 32, wherein said at least one liquid fatty alcohol is present in a concentration ranging from 1% to 10% by weight, relative to the approximate total weight of the composition.

34. (Previously Presented) The composition according to claim 33, wherein said at least one liquid fatty alcohol is present in a concentration ranging from 1.5% to 3% by weight, relative to the total weight of the composition.

35. (Previously Presented) The composition according to claim 19, wherein said at least one cationic surfactant is chosen from:

A) quaternary ammonium salts of formula (IV):



wherein  $X^-$  of formula (IV) is an anion chosen from halide anions,  $(C_2-C_6)$ alkyl sulfate anions, phosphate anions, alkyl sulfonate anions, alkylaryl sulfonate anions, and anions derived from an organic acid, and

(i)  $R_1$ ,  $R_2$ , and  $R_3$ , of formula (IV), which may be identical or different, are chosen from aromatic groups and from linear and branched aliphatic groups comprising from 1 to 4 carbon atoms, wherein said aliphatic groups optionally comprise at least one heteroatom, and then

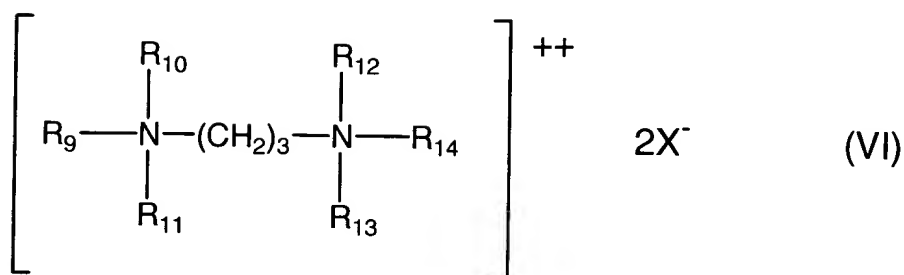
$R_4$  of formula (IV) is chosen from linear and branched alkyl groups comprising from 20 to 30 carbon atoms; or alternatively

(ii)  $R_1$  and  $R_2$ , of formula (IV), which may be identical or different, are chosen from aromatic groups and from linear and branched aliphatic groups comprising from 1 to 4 carbon atoms, wherein said aliphatic groups optionally comprise at least one heteroatom, and then

$R_3$  and  $R_4$ , of formula (IV), which may be identical or different, are chosen from linear and branched alkyl groups comprising from 12 to 30 carbon atoms, wherein said alkyl groups comprise at least one group chosen from ester groups and amide groups;

B) - quaternary ammonium salts of imidazolinium;

C) - quaternary diammonium salts of formula (VI):



wherein

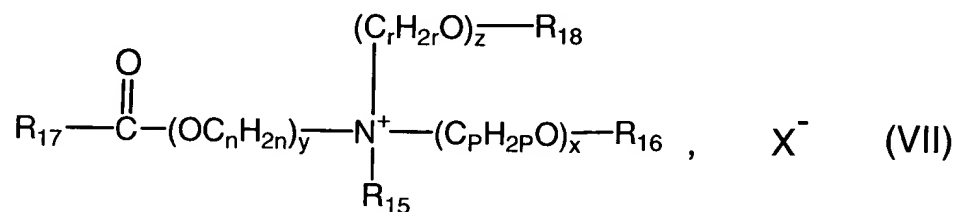
$\text{R}_9$  is chosen from aliphatic groups comprising from about 16 to 30 carbon atoms,

$\text{R}_{10}$ ,  $\text{R}_{11}$ ,  $\text{R}_{12}$ ,  $\text{R}_{13}$  and  $\text{R}_{14}$ , which may be identical or different, are chosen from hydrogen and alkyl groups comprising from 1 to 4 carbon atoms, and

$\text{X}^-$  of formula (VI) is an anion chosen from halide anions, acetate anions, phosphate anions, nitrate anions and methyl sulfate anions;

and

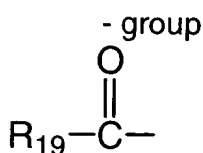
D) - quaternary ammonium salts, comprising at least one ester functional group, of formula (VII),:



wherein

-  $\text{R}_{15}$  is chosen from  $\text{C}_1$ - $\text{C}_6$  alkyl groups,  $\text{C}_1$ - $\text{C}_6$  hydroxyalkyl groups, and dihydroxyalkyl groups;

- R<sub>16</sub> is chosen from:

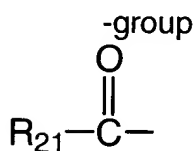


- linear and branched, saturated and unsaturated, C<sub>1</sub>-C<sub>22</sub> hydrocarbon groups

R<sub>20</sub>, and

- hydrogen,

- R<sub>18</sub> is chosen from:



- linear and branched, saturated and unsaturated, C<sub>1</sub>-C<sub>6</sub> hydrocarbon groups R<sub>22</sub>,  
and

- hydrogen,

- R<sub>17</sub>, R<sub>19</sub> and R<sub>21</sub>, which are identical or different, are each chosen from linear and branched, saturated and unsaturated, C<sub>7</sub>-C<sub>21</sub> hydrocarbon groups;

- n, p and r, of formula (VII), which are identical or different, are each integers having values ranging from 2 to 6;

- y of formula (VII) is an integer having a value ranging from 1 to 10;

- x and z, of formula (VII), which are identical or different, are each integers having values ranging from 0 to 10;

- X<sup>-</sup> of formula (VII) is an anion chosen from organic anions and inorganic anions, and chosen from simple anions and complex anions;

with the provisos that the sum  $x + y + z$ , of formula (VII), has a value ranging from 1 to 15, that when  $x$  of formula (VII) has a value of 0, then  $R_{16}$  denotes  $R_{20}$ , and that when  $z$  of formula (VII) has a value of 0, then  $R_{18}$  denotes  $R_{22}$ .

36. (Previously Presented) The composition according to claim 35, wherein said at least one cationic surfactant is chosen from a quaternary ammonium salt of formula (IV) wherein  $X^-$  of formula (IV) is an anionic halide chosen from chloride, bromide and iodide.

37. (Previously Presented) The composition according to claim 35, wherein said at least one cationic surfactant is chosen from a quaternary ammonium salt of formula (IV) wherein  $X^-$  of formula (IV) is methyl sulfate.

38. (Previously Presented) The composition according to claim 35, wherein said at least one cationic surfactant is chosen from quaternary ammonium salts of formula (IV) wherein  $X^-$  of formula (IV) is an anion derived from an organic acid chosen from acetate and lactate.

39. (Previously Presented) The composition according to claim 35, wherein said at least one cationic surfactant is chosen from quaternary ammonium salts of formula (IV) wherein in (i),  $R_1$ ,  $R_2$  and  $R_3$ , of formula (IV), which may be identical or different, are chosen from aryl groups and alkylaryl groups.

40. (Previously Presented) The composition according to claim 35, wherein said at least one cationic surfactant is chosen from quaternary ammonium salts of

formula (IV) wherein in (i),  $R_1$ ,  $R_2$  and  $R_3$ , of formula (IV), which may be identical or different, are chosen from aliphatic groups comprising at least one heteroatom chosen from oxygen, nitrogen, sulfur, and halogens.

41. (Previously Presented) The composition according to claim 35, wherein said at least one cationic surfactant is chosen from quaternary ammonium salts of formula (IV) wherein in (ii),  $R_1$  and  $R_2$ , of formula (IV), which may be identical or different, are chosen from aryl groups and alkylaryl groups.

42. (Previously Presented) The composition according to claim 35, wherein said at least one cationic surfactant is chosen from quaternary ammonium salts of formula (IV) wherein in (ii),  $R_1$  and  $R_2$ , of formula (IV), which may be identical or different, are chosen from aliphatic groups comprising at least one heteroatom chosen from oxygen, nitrogen, sulfur and halogens.

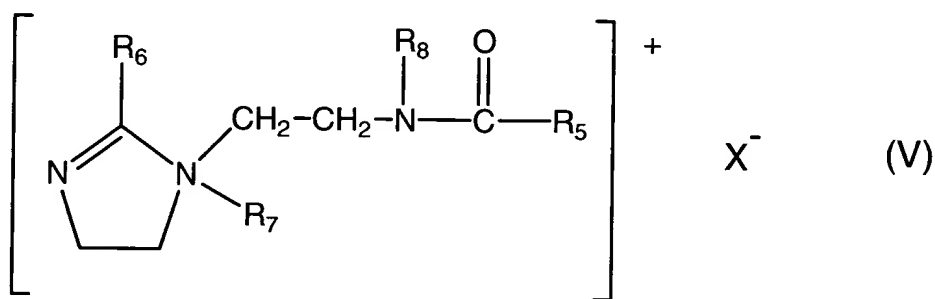
43. (Previously Presented) The composition according to claim 35, wherein said at least one cationic surfactant is chosen from quaternary ammonium salts of formula (IV) wherein in (ii),  $R_1$  and  $R_2$ , of formula (IV), which may be identical or different, are chosen from aliphatic groups comprising from 1 to 4 carbon atoms and chosen from alkyl groups, alkoxy groups, alkylamide groups and hydroxyalkyl groups.

44. (Previously Presented) The composition according to claim 35, wherein said at least one cationic surfactant is chosen from quaternary ammonium salts of formula (IV) wherein in (ii), at least one of  $R_3$  and  $R_4$ , of formula (IV), which may be



identical or different, is chosen from (C<sub>12</sub>-C<sub>22</sub>)alkylamido(C<sub>2</sub>-C<sub>6</sub>)alkyl groups and (C<sub>12</sub>-C<sub>22</sub>)alkyl acetate groups.

45. (Previously Presented) The composition according to claim 35, wherein said at least one cationic surfactant is a quaternary ammonium salt of imidazolinium of formula (V):



wherein R<sub>5</sub> of formula (V) is chosen from alkenyl groups comprising from 8 to 30 carbon atoms and alkyl groups comprising from 8 to 30 carbon atoms, R<sub>6</sub> of formula (V) is chosen from hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl groups, alkenyl groups comprising from 8 to 30 carbon atoms, and alkyl groups comprising from 8 to 30 carbon atoms, R<sub>7</sub> of formula (V) is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl groups, R<sub>8</sub> of formula (V) is chosen from hydrogen and C<sub>1</sub>-C<sub>4</sub> alkyl groups, and X<sup>-</sup> of formula (V) is an anion chosen from halide anions, phosphate anions, acetate anions, lactate anions, alkyl sulfate anions, alkyl sulfonate anions and alkylaryl sulfonate anions.

46. (Previously Presented) The composition according to claim 45, wherein in said formula (V), R<sub>5</sub> of formula (V) is chosen from alkenyl groups comprising from 8 to

30 carbon atoms and alkyl groups comprising from 8 to 30 carbon atoms, wherein said alkenyl groups and alkyl groups are derived from tallow fatty acids.

47. (Previously Presented) The composition according to claim 45, wherein said at least one cationic surfactant is the quaternary diammonium salt propanetallowdiammonium dichloride.

48. (Previously Presented) The composition according to claim 19, wherein said at least one cationic surfactant is chosen from behenyltrimethylammonium salts, stearamidopropyl dimethyl (myristyl acetate) ammonium salts, Quaternium-27 and Quaternium-83.

49. (Previously Presented) The composition according to claim 19, wherein said at least one cationic surfactant is present at a concentration ranging from 0.2% to 10% by weight, relative to the total weight of the composition.

50. (Previously Presented) The composition according to claim 49, wherein said at least one cationic surfactant is present at a concentration ranging from 0.5% to 5% by weight, relative to the total weight of the composition.

51. (Previously Presented) The composition according to claim 50, wherein said at least one cationic surfactant is present at a concentration ranging from 1% to 3.5% by weight, relative to the total weight of the composition.

52. (Previously Presented) The composition according to claim 19, wherein said cosmetically acceptable aqueous medium is chosen from water and a mixture of water and at least one cosmetically acceptable solvent.

53. (Previously Presented) The composition according to claim 52, wherein said cosmetically acceptable solvents are chosen from monoalcohols, polyalcohols, and glycol ethers.

54. (Previously Presented) The composition according to claim 19, further comprising at least one additive chosen from thickeners, perfumes, pearlescent agents, surfactants, preservatives, sunscreens, silicones, anionic polymers, nonionic polymers, cationic polymers, amphoteric polymers, proteins, protein hydrolysates, fatty acids, fatty alcohols, fatty esters, hydroxy acids, vitamins, provitamins, panthenol, vegetable oils, animal oils, mineral oils, and synthetic oils.

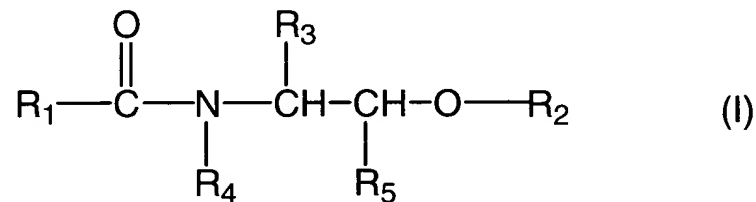
55. (Previously Presented) The composition according to claim 54, wherein said at least one additive is 18-methyleicosanoic acid.

56. (Previously Presented) The composition according to claim 19, wherein said composition is in the form of a composition chosen from: a shampoo; a leave-in conditioner; a rinse-out conditioner; compositions for at least one of permanent waving hair, straightening hair, dyeing hair and bleaching hair; a rinse-out composition to be applied before or after shampooing hair, dyeing hair, bleaching hair, permanent waving hair or hair straightening, or between two stages of permanent waving hair or hair

straightening; and a leave-in composition for holding a hair style, for hair shaping or for hair styling.

57. (Previously Presented) A method of making a composition to be applied to the hair, comprising combining, in a cosmetically acceptable aqueous medium, at least one liquid fatty alcohol, at least one ceramide compound and at least one cationic surfactant, wherein the at least one fatty liquid alcohol contains no more than one hydroxyl group.

58. (Previously Presented) The method according to claim 57, wherein said at least one ceramide compound is of formula (I):



wherein:

- R<sub>1</sub> is chosen from:

- a saturated or unsaturated, linear or branched, C<sub>1</sub>-C<sub>50</sub> hydrocarbon group, wherein said C<sub>1</sub>-C<sub>50</sub> hydrocarbon group is optionally substituted with at least one hydroxyl group, wherein said hydroxyl group is optionally esterified by an acid R<sub>7</sub>COOH, R<sub>7</sub> being chosen from a linear or branched, saturated or unsaturated, C<sub>1</sub>-C<sub>35</sub> hydrocarbon group, wherein said C<sub>1</sub>-C<sub>35</sub> hydrocarbon group of R<sub>7</sub> is optionally substituted with at least one hydroxyl group that is optionally esterified by a linear or

branched, saturated or unsaturated, C<sub>1</sub>-C<sub>35</sub> fatty acid, wherein said C<sub>1</sub>-C<sub>35</sub> fatty acid is optionally substituted with at least one hydroxyl group;

- a group R''-(NR-CO)-R', wherein R is chosen from hydrogen and a C<sub>1</sub>-C<sub>20</sub> hydrocarbon group substituted with at least one hydroxyl group, and wherein R' and R'' are chosen from hydrocarbon groups, wherein the sum of the carbon atoms in R' and R'' ranges from 9 to 30, and wherein R' is a divalent radical; and

- a group R<sub>8</sub>-O-CO-(CH<sub>2</sub>)<sub>p</sub>, wherein R<sub>8</sub> is a C<sub>1</sub>-C<sub>20</sub> hydrocarbon group, and p is an integer ranging from 1 to 12;

- R<sub>2</sub> is chosen from hydrogen, a saccharide group, a sulfate residue, a phosphate residue, a phosphorylethylamine group and a phosphorylethylammonium group;

- R<sub>3</sub> is chosen from hydrogen and a saturated or unsaturated, linear or branched, C<sub>2</sub>-C<sub>33</sub> hydrocarbon group, wherein said C<sub>1</sub>-C<sub>33</sub> hydrocarbon group is optionally substituted with at least one hydroxyl group, wherein said hydroxyl group is

- optionally esterified by an acid chosen from an inorganic acid and an acid R<sub>7</sub>COOH, wherein R<sub>7</sub> has the same meaning as above, or

- optionally etherified by a group chosen from a (glycosyl)<sub>n</sub> group, a (galactosyl)<sub>m</sub> group, a sulfogalactosyl group, a phosphorylethylamine group and a phosphorylethylammonium group, wherein n is an integer ranging from 1 to 4 and m is an integer ranging from 1 to 8 ,

and wherein R<sub>3</sub> is optionally substituted with at least one C<sub>1</sub>-C<sub>14</sub> alkyl group;

- R<sub>4</sub> is chosen from hydrogen, a methyl group, an ethyl group, an optionally hydroxylated, linear or branched, saturated or unsaturated, C<sub>3</sub>-C<sub>50</sub> hydrocarbon group, a group -CH<sub>2</sub>-CHOH-CH<sub>2</sub>-O-R<sub>6</sub>, wherein R<sub>6</sub> is chosen from a C<sub>10</sub>-C<sub>26</sub> hydrocarbon group and a group R<sub>8</sub>-O-CO-(CH<sub>2</sub>)<sub>p</sub>, wherein R<sub>8</sub> is a C<sub>1</sub>-C<sub>20</sub> hydrocarbon group, and p is an integer ranging from 1 to 12;

- R<sub>5</sub> is chosen from hydrogen and a saturated or unsaturated, linear or branched, C<sub>1</sub>-C<sub>33</sub> hydrocarbon group optionally substituted with at least one hydroxyl group, wherein said hydroxyl group is optionally etherified by a group chosen from a (glycosyl)<sub>n</sub> group, a (galactosyl)<sub>m</sub> group, a sulfogalactosyl group, a phosphorylethylamine group, and a phosphorylethylammonium group, wherein m and n have the same meanings as above; and

with the proviso that when R<sub>3</sub> and R<sub>5</sub> are each hydrogen or when R<sub>3</sub> is hydrogen and R<sub>5</sub> is a methyl group, then R<sub>4</sub> is not chosen from hydrogen, a methyl group, and an ethyl group.

59. (Previously Presented) The method according to claim 57, wherein said at least one ceramide compound is chosen from:

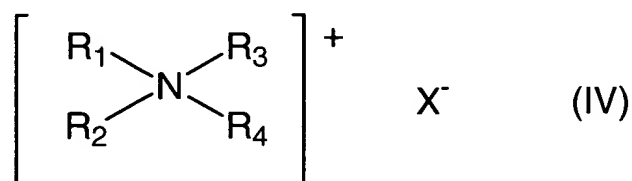
- 2-(N-linoleoylamino)-1,3-octadecanediol,
- 2-(N-oleoylamino)-1,3-octadecanediol,
- 2-(N-palmitoylamino)-1,3-octadecanediol,
- 2-(N-stearoylamino)-1,3-octadecanediol,
- 2-(N-behenoylamino)-1,3-octadecanediol,
- 2-[N-(2-hydroxypalmitoyl)amino]-1,3-octadecanediol,
- 2-(N-stearoylamino)-1,3,4-octadecanetriol, and
- 2-(N-palmitoylamino)-1,3-hexadecanediol.

60. (Previously Presented) The method according to claim 57, wherein said at least one ceramide compound is chosen from bis(N-hydroxyethyl-N-cetyl)malonamide, N-(2-hydroxyethyl)-N-(3-cetyloxy-2-hydroxypropyl)amide of cetylic acid and N-docosanoyl-N-methyl-D-glucamine.

61. (Previously Presented) The method according to claim 57, wherein said at least one liquid fatty alcohol is chosen from lauryl alcohol, isomyristyl alcohol, isostearyl alcohol, isocetyl alcohol, isoarachidyl alcohol, 2-octyldodecanol, 2-butyloctanol and oleyl alcohol.

62. (Previously Presented) The method according to claim 57, wherein said at least one cationic surfactant is chosen from:

A) quaternary ammonium salts of formula (IV):



wherein  $X^-$  of formula (IV) is an anion chosen from halide anions,  $(C_2-C_6)$ alkyl sulfate anions, phosphate anions, alkyl sulfonate anions, alkylaryl sulfonate anions, and anions derived from an organic acid, and

(i)  $R_1$ ,  $R_2$ , and  $R_3$ , of formula (IV), which may be identical or different, are chosen from aromatic groups and from linear and branched aliphatic groups comprising from 1 to 4 carbon atoms, wherein said aliphatic groups optionally comprise at least one heteroatom, and then

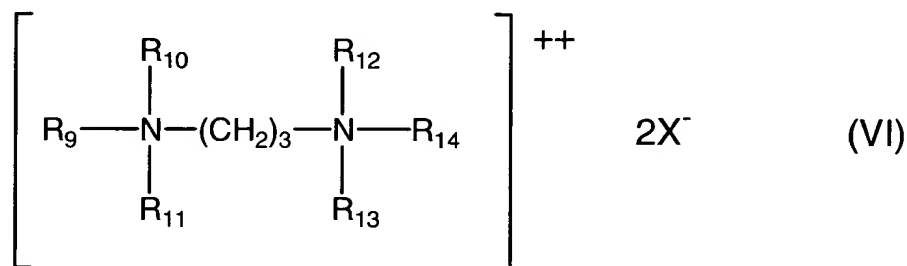
$R_4$  of formula (IV) is chosen from linear and branched alkyl groups comprising from 20 to 30 carbon atoms; or alternatively

(ii)  $R_1$  and  $R_2$ , of formula (IV), which may be identical or different, are chosen from aromatic groups and from linear and branched aliphatic groups comprising

from 1 to 4 carbon atoms, wherein said aliphatic groups optionally comprise at least one heteroatom, and then

$R_3$  and  $R_4$ , of formula (IV), which may be identical or different, are chosen from linear and branched alkyl groups comprising from 12 to 30 carbon atoms, wherein said alkyl groups comprise at least one group chosen from ester groups and amide groups;

- B) - quaternary ammonium salts of imidazolinium;
- C) - quaternary diammonium salts of formula (VI):



wherein

$R_9$  is chosen from aliphatic groups comprising from about 16 to 30 carbon atoms,

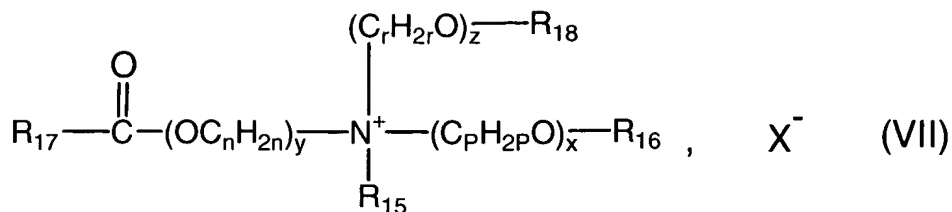
$R_{10}$ ,  $R_{11}$ ,  $R_{12}$ ,  $R_{13}$  and  $R_{14}$ , which may be identical or different, are chosen from hydrogen and alkyl groups comprising from 1 to 4 carbon atoms, and

$X^-$  of formula (VI) is an anion chosen from halide anions, acetate anions, phosphate anions, nitrate anions and methyl sulfate anions;

and

D) - quaternary ammonium salts, comprising at least one ester functional group, of formula (VII),:

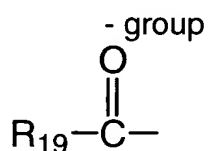




wherein

- R<sub>15</sub> is chosen from C<sub>1</sub>-C<sub>6</sub> alkyl groups, C<sub>1</sub>-C<sub>6</sub> hydroxyalkyl groups, and dihydroxyalkyl groups;

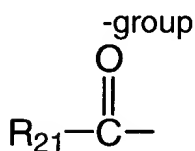
- R<sub>16</sub> is chosen from:



- linear and branched, saturated and unsaturated, C<sub>1</sub>-C<sub>22</sub> hydrocarbon groups R<sub>20</sub>, and

- hydrogen,

- R<sub>18</sub> is chosen from:



- linear and branched, saturated and unsaturated, C<sub>1</sub>-C<sub>6</sub> hydrocarbon groups R<sub>22</sub>, and

- hydrogen,

- R<sub>17</sub>, R<sub>19</sub> and R<sub>21</sub>, which are identical or different, are each chosen from linear and branched, saturated and unsaturated, C<sub>7</sub>-C<sub>21</sub> hydrocarbon groups;

- n, p and r, of formula (VII), which are identical or different, are each integers having values ranging from 2 to 6;

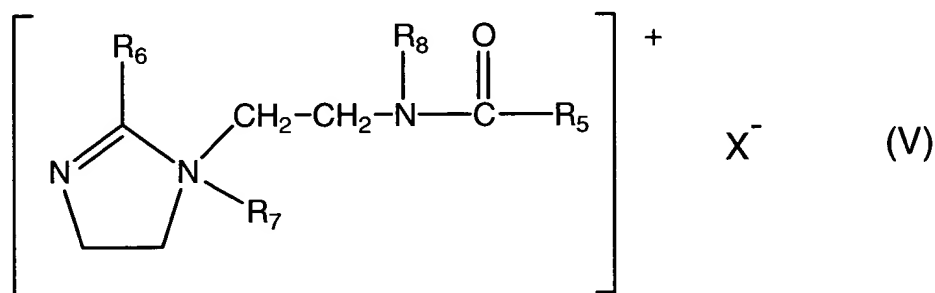
- y of formula (VII) is an integer having a value ranging from 1 to 10;

- x and z, of formula (VII), which are identical or different, are each integers having values ranging from 0 to 10;

- X<sup>-</sup> of formula (VII) is an anion chosen from organic anions and inorganic anions, and chosen from simple anions and complex anions;

with the provisos that the sum x + y + z, of formula (VII), has a value ranging from 1 to 15, that when x of formula (VII) has a value of 0, then R<sub>16</sub> denotes R<sub>20</sub>, and that when z of formula (VII) has a value of 0, then R<sub>18</sub> denotes R<sub>22</sub>.

63. (Previously Presented) The method according to claim 62, wherein said at least one cationic surfactant is a quaternary ammonium salt of imidazolinium of formula (V):



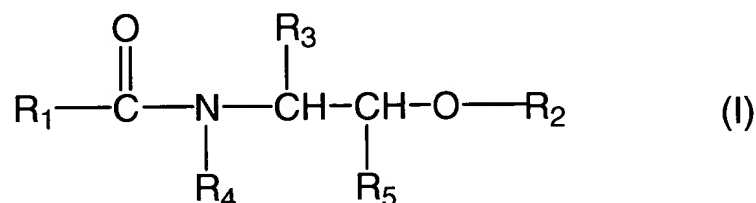
wherein R<sub>5</sub> of formula (V) is chosen from alkenyl groups comprising from 8 to 30 carbon atoms and alkyl groups comprising from 8 to 30 carbon atoms, R<sub>6</sub> of formula (V) is chosen from hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl groups, alkenyl groups comprising from 8 to 30

carbon atoms, and alkyl groups comprising from 8 to 30 carbon atoms,  $R_7$  of formula (V) is chosen from  $C_1$ - $C_4$  alkyl groups,  $R_8$  of formula (V) is chosen from hydrogen and  $C_1$ - $C_4$  alkyl groups, and  $X^-$  of formula (V) is an anion chosen from halide anions, phosphate anions, acetate anions, lactate anions, alkyl sulfate anions, alkyl sulfonate anions and alkylaryl sulfonate anions.

64. (Previously Presented) A method for treating keratinous materials, comprising applying at least one composition to said keratinous materials, and then optionally rinsing with water, wherein said at least one composition comprises, in a cosmetically acceptable aqueous medium, at least one liquid fatty alcohol, at least one ceramide compound and at least one cationic surfactant, wherein the at least one fatty liquid alcohol contains no more than one hydroxyl group.

65. (Previously Presented) The method according to claim 64, wherein said keratinous materials are chosen from hair.

66. (Previously Presented) The method according to claim 64, wherein said at least one ceramide compound is of formula (I):



wherein:

-  $R_1$  is chosen from:

- a saturated or unsaturated, linear or branched,  $C_1$ - $C_{50}$  hydrocarbon group, wherein said  $C_1$ - $C_{50}$  hydrocarbon group is optionally substituted with at least one hydroxyl group, wherein said hydroxyl group is optionally esterified by an acid  $R_7COOH$ ,  $R_7$  being chosen from a linear or branched, saturated or unsaturated,  $C_1$ - $C_{35}$  hydrocarbon group, wherein said  $C_1$ - $C_{35}$  hydrocarbon group of  $R_7$  is optionally substituted with at least one hydroxyl group that is optionally esterified by a linear or branched, saturated or unsaturated,  $C_1$ - $C_{35}$  fatty acid, wherein said  $C_1$ - $C_{35}$  fatty acid is optionally substituted with at least one hydroxyl group;

- a group  $R''-(NR-CO)-R'$ , wherein  $R$  is chosen from hydrogen and a  $C_1$ - $C_{20}$  hydrocarbon group substituted with at least one hydroxyl group, and wherein  $R'$  and  $R''$  are chosen from hydrocarbon groups, wherein the sum of the carbon atoms in  $R'$  and  $R''$  ranges from 9 to 30, and wherein  $R'$  is a divalent radical; and

- a group  $R_8-O-CO-(CH_2)_p$ , wherein  $R_8$  is a  $C_1$ - $C_{20}$  hydrocarbon group, and  $p$  is an integer ranging from 1 to 12;

-  $R_2$  is chosen from hydrogen, a saccharide group, a sulfate residue, a phosphate residue, a phosphorylethylamine group and a phosphorylethylammonium group;

-  $R_3$  is chosen from hydrogen and a saturated or unsaturated, linear or branched,  $C_2$ - $C_{33}$  hydrocarbon group, wherein said  $C_1$ - $C_{33}$  hydrocarbon group is optionally substituted with at least one hydroxyl group, wherein said hydroxyl group is

- optionally esterified by an acid chosen from an inorganic acid and an acid  $R_7COOH$ , wherein  $R_7$  has the same meaning as above, or

- optionally etherified by a group chosen from a (glycosyl) $_n$  group, a (galactosyl) $_m$  group, a sulfogalactosyl group, a phosphorylethylamine group and a phosphorylethylammonium group, wherein  $n$  is an integer ranging from 1 to 4 and  $m$  is an integer ranging from 1 to 8 ,

and wherein  $R_3$  is optionally substituted with at least one  $C_1$ - $C_{14}$  alkyl group;

-  $R_4$  is chosen from hydrogen, a methyl group, an ethyl group, an optionally hydroxylated, linear or branched, saturated or unsaturated,  $C_3$ - $C_{50}$  hydrocarbon group, a group  $-CH_2-CHOH-CH_2-O-R_6$ , wherein  $R_6$  is chosen from a  $C_{10}$ - $C_{26}$  hydrocarbon group and a group  $R_8-O-CO-(CH_2)_p$ , wherein  $R_8$  is a  $C_1$ - $C_{20}$  hydrocarbon group, and  $p$  is an integer ranging from 1 to 12;

-  $R_5$  is chosen from hydrogen and a saturated or unsaturated, linear or branched,  $C_1$ - $C_{33}$  hydrocarbon group optionally substituted with at least one hydroxyl group, wherein said hydroxyl group is optionally etherified by a group chosen from a (glycosyl) $_n$  group, a (galactosyl) $_m$  group, a sulfogalactosyl group, a phosphorylethylamine group, and a phosphorylethylammonium group, wherein  $m$  and  $n$  have the same meanings as above; and

with the proviso that when  $R_3$  and  $R_5$  are each hydrogen or when  $R_3$  is hydrogen and  $R_5$  is a methyl group, then  $R_4$  is not chosen from hydrogen, a methyl group, and an ethyl group.

67. (Previously Presented) The method according to claim 64, wherein said at least one ceramide compound is chosen from:

- 2-(N-linoleoylamino)-1,3-octadecanediol,
- 2-(N-oleoylamino)-1,3-octadecanediol,
- 2-(N-palmitoylamino)-1,3-octadecanediol,
- 2-(N-stearoylamino)-1,3-octadecanediol,
- 2-(N-behenoylamino)-1,3-octadecanediol,
- 2-[N-(2-hydroxypalmitoyl)amino]-1,3-octadecanediol,
- 2-(N-stearoylamino)-1,3,4-octadecanetriol, and

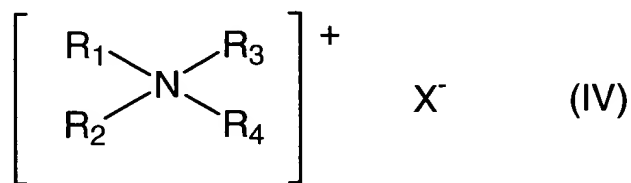
- 2-(N-palmitoylamino)-1,3-hexadecanediol.

68. (Previously Presented) The method according to claim 64, wherein said at least one ceramide compound is chosen from bis(N-hydroxyethyl-N-cetyl)malonamide, N-(2-hydroxyethyl)-N-(3-cetyloxy-2-hydroxypropyl)amide of cetylic acid and N-docosanoyl-N-methyl-D-glucamine.

69. (Previously Presented) The method according to claim 64, wherein said at least one liquid fatty alcohol is chosen from lauryl alcohol, isomyristyl alcohol, isostearyl alcohol, isocetyl alcohol, isoarachidyl alcohol, 2-octyldodecanol, 2-butyloctanol and oleyl alcohol.

70. (Previously Presented) The method according to claim 64, wherein said at least one cationic surfactant is chosen from:

A) quaternary ammonium salts of formula (IV):



wherein  $X^-$  of formula (IV) is an anion chosen from halide anions,  $(C_2-C_6)$ alkyl sulfate anions, phosphate anions, alkyl sulfonate anions, alkylaryl sulfonate anions, and anions derived from an organic acid, and

(i)  $R_1$ ,  $R_2$ , and  $R_3$ , of formula (IV), which may be identical or different, are chosen from aromatic groups and from linear and branched aliphatic groups

comprising from 1 to 4 carbon atoms, wherein said aliphatic groups optionally comprise at least one heteroatom, and then

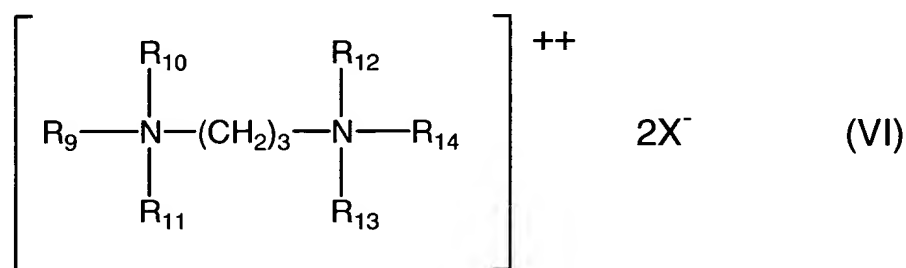
R<sub>4</sub> of formula (IV) is chosen from linear and branched alkyl groups comprising from 20 to 30 carbon atoms; or alternatively

(ii) R<sub>1</sub> and R<sub>2</sub>, of formula (IV), which may be identical or different, are chosen from aromatic groups and from linear and branched aliphatic groups comprising from 1 to 4 carbon atoms, wherein said aliphatic groups optionally comprise at least one heteroatom, and then

R<sub>3</sub> and R<sub>4</sub>, of formula (IV), which may be identical or different, are chosen from linear and branched alkyl groups comprising from 12 to 30 carbon atoms, wherein said alkyl groups comprise at least one group chosen from ester groups and amide groups;

B) - quaternary ammonium salts of imidazolinium;

C) - quaternary diammonium salts of formula (VI):



wherein

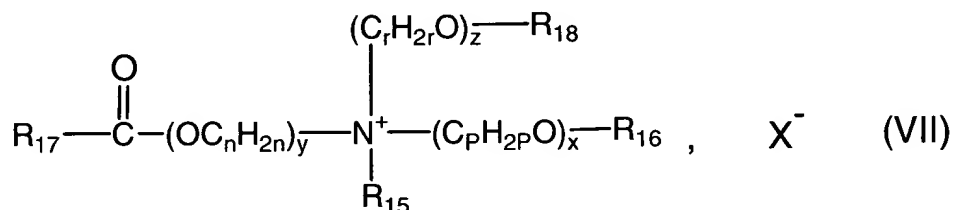
R<sub>9</sub> is chosen from aliphatic groups comprising from about 16 to 30 carbon atoms,

$R_{10}$ ,  $R_{11}$ ,  $R_{12}$ ,  $R_{13}$  and  $R_{14}$ , which may be identical or different, are chosen from hydrogen and alkyl groups comprising from 1 to 4 carbon atoms, and

$X^-$  of formula (VI) is an anion chosen from halide anions, acetate anions, phosphate anions, nitrate anions and methyl sulfate anions;

and

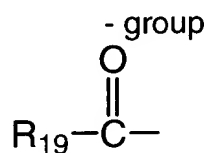
D) - quaternary ammonium salts, comprising at least one ester functional group, of formula (VII),:



wherein

-  $R_{15}$  is chosen from  $C_1$ - $C_6$  alkyl groups,  $C_1$ - $C_6$  hydroxyalkyl groups, and dihydroxyalkyl groups;

-  $R_{16}$  is chosen from:



- linear and branched, saturated and unsaturated,  $C_1$ - $C_{22}$  hydrocarbon groups

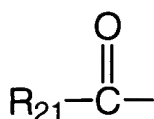
$R_{20}$ , and

- hydrogen,

-  $R_{18}$  is chosen from:

-group





- linear and branched, saturated and unsaturated, C<sub>1</sub>-C<sub>6</sub> hydrocarbon groups R<sub>22</sub>,  
and

- hydrogen,

- R<sub>17</sub>, R<sub>19</sub> and R<sub>21</sub>, which are identical or different, are each chosen from linear  
and branched, saturated and unsaturated, C<sub>7</sub>-C<sub>21</sub> hydrocarbon groups;

- n, p and r, of formula (VII), which are identical or different, are each integers  
having values ranging from 2 to 6;

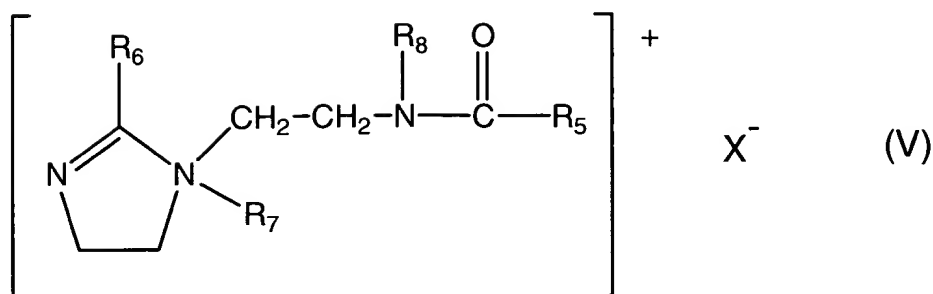
- y of formula (VII) is an integer having a value ranging from 1 to 10;

- x and z, of formula (VII), which are identical or different, are each integers  
having values ranging from 0 to 10;

- X<sup>-</sup> of formula (VII) is an anion chosen from organic anions and inorganic anions,  
and chosen from simple anions and complex anions;

with the provisos that the sum x + y + z, of formula (VII), has a value ranging  
from 1 to 15, that when x of formula (VII) has a value of 0, then R<sub>16</sub> denotes R<sub>20</sub>, and  
that when z of formula (VII) has a value of 0, then R<sub>18</sub> denotes R<sub>22</sub>.

71. (Previously Presented) The method according to claim 70, wherein said  
at least one cationic surfactant is a quaternary ammonium salt of imidazolinium of  
formula (V):



wherein R<sub>5</sub> of formula (V) is chosen from alkenyl groups comprising from 8 to 30 carbon atoms and alkyl groups comprising from 8 to 30 carbon atoms, R<sub>6</sub> of formula (V) is chosen from hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl groups, alkenyl groups comprising from 8 to 30 carbon atoms, and alkyl groups comprising from 8 to 30 carbon atoms, R<sub>7</sub> of formula (V) is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl groups, R<sub>8</sub> of formula (V) is chosen from hydrogen and C<sub>1</sub>-C<sub>4</sub> alkyl groups, and X<sup>-</sup> of formula (V) is an anion chosen from halide anions, phosphate anions, acetate anions, lactate anions, alkyl sulfate anions, alkyl sulfonate anions and alkylaryl sulfonate anions.

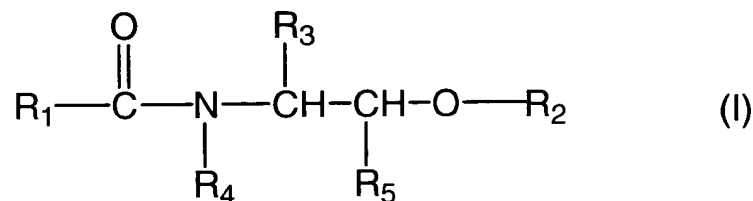
72. (Previously Presented) The method for treating of keratinous materials according to claim 64, wherein said treating is chosen from: a shampooing; conditioning; dyeing; bleaching; permanent waving; and straightening.

73. (Previously Presented) The method for treating of keratinous materials according to claim 64, wherein said at least one composition is applied to said keratinous materials before or after treating said keratinous materials.

74. (Previously Presented) A method of protecting keratinous materials from physical or chemical attacks, comprising applying at least one composition to said keratinous materials, wherein said at least one composition comprises, in a cosmetically acceptable aqueous medium, at least one liquid fatty alcohol, at least one ceramide compound and at least one cationic surfactant, wherein the at least one fatty liquid alcohol contains no more than one hydroxyl group.

75. (Previously Presented) The method according to claim 74, wherein said keratinous materials are chosen from hair.

76. (Previously Presented) The method according claim 74, wherein said at least one ceramide compound is of formula (I):



wherein:

- R<sub>1</sub> is chosen from:

- a saturated or unsaturated, linear or branched, C<sub>1</sub>-C<sub>50</sub> hydrocarbon group, wherein said C<sub>1</sub>-C<sub>50</sub> hydrocarbon group is optionally substituted with at least one hydroxyl group, wherein said hydroxyl group is optionally esterified by an acid R<sub>7</sub>COOH, R<sub>7</sub> being chosen from a linear or branched, saturated or unsaturated, C<sub>1</sub>-C<sub>35</sub> hydrocarbon group, wherein said C<sub>1</sub>-C<sub>35</sub> hydrocarbon group of R<sub>7</sub> is optionally substituted with at least one hydroxyl group that is optionally esterified by a linear or

branched, saturated or unsaturated, C<sub>1</sub>-C<sub>35</sub> fatty acid, wherein said C<sub>1</sub>-C<sub>35</sub> fatty acid is optionally substituted with at least one hydroxyl group;

- a group R''-(NR-CO)-R', wherein R is chosen from hydrogen and a C<sub>1</sub>-C<sub>20</sub> hydrocarbon group substituted with at least one hydroxyl group, and wherein R' and R'' are chosen from hydrocarbon groups, wherein the sum of the carbon atoms in R' and R'' ranges from 9 to 30, and wherein R' is a divalent radical; and

- a group R<sub>8</sub>-O-CO-(CH<sub>2</sub>)<sub>p</sub>, wherein R<sub>8</sub> is a C<sub>1</sub>-C<sub>20</sub> hydrocarbon group, and p is an integer ranging from 1 to 12;

- R<sub>2</sub> is chosen from hydrogen, a saccharide group, a sulfate residue, a phosphate residue, a phosphorylethylamine group and a phosphorylethylammonium group;

- R<sub>3</sub> is chosen from hydrogen and a saturated or unsaturated, linear or branched, C<sub>2</sub>-C<sub>33</sub> hydrocarbon group, wherein said C<sub>1</sub>-C<sub>33</sub> hydrocarbon group is optionally substituted with at least one hydroxyl group, wherein said hydroxyl group is

- optionally esterified by an acid chosen from an inorganic acid and an acid R<sub>7</sub>COOH, wherein R<sub>7</sub> has the same meaning as above, or

- optionally etherified by a group chosen from a (glycosyl)<sub>n</sub> group, a (galactosyl)<sub>m</sub> group, a sulfogalactosyl group, a phosphorylethylamine group and a phosphorylethylammonium group, wherein n is an integer ranging from 1 to 4 and m is an integer ranging from 1 to 8 ,

and wherein R<sub>3</sub> is optionally substituted with at least one C<sub>1</sub>-C<sub>14</sub> alkyl group;

- R<sub>4</sub> is chosen from hydrogen, a methyl group, an ethyl group, an optionally hydroxylated, linear or branched, saturated or unsaturated, C<sub>3</sub>-C<sub>50</sub> hydrocarbon group, a group -CH<sub>2</sub>-CHOH-CH<sub>2</sub>-O-R<sub>6</sub>, wherein R<sub>6</sub> is chosen from a C<sub>10</sub>-C<sub>26</sub> hydrocarbon group and a group R<sub>8</sub>-O-CO-(CH<sub>2</sub>)<sub>p</sub>, wherein R<sub>8</sub> is a C<sub>1</sub>-C<sub>20</sub> hydrocarbon group, and p is an integer ranging from 1 to 12;

- R<sub>5</sub> is chosen from hydrogen and a saturated or unsaturated, linear or branched, C<sub>1</sub>-C<sub>33</sub> hydrocarbon group optionally substituted with at least one hydroxyl group, wherein said hydroxyl group is optionally etherified by a group chosen from a (glycosyl)<sub>n</sub> group, a (galactosyl)<sub>m</sub> group, a sulfogalactosyl group, a phosphorylethylamine group, and a phosphorylethylammonium group, wherein m and n have the same meanings as above; and

with the proviso that when R<sub>3</sub> and R<sub>5</sub> are each hydrogen or when R<sub>3</sub> is hydrogen and R<sub>5</sub> is a methyl group, then R<sub>4</sub> is not chosen from hydrogen, a methyl group, and an ethyl group.

77. (Previously Presented) The method according to claim 74, wherein said at least one ceramide compound is chosen from:

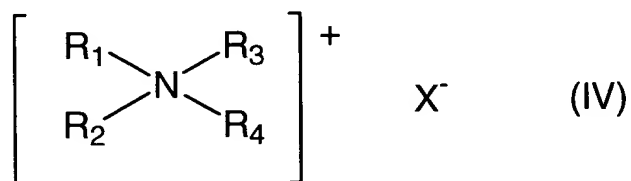
- 2-(N-linoleoylamino)-1,3-octadecanediol,
- 2-(N-oleoylamino)-1,3-octadecanediol,
- 2-(N-palmitoylamino)-1,3-octadecanediol,
- 2-(N-stearoylamino)-1,3-octadecanediol,
- 2-(N-behenoylamino)-1,3-octadecanediol,
- 2-[N-(2-hydroxypalmitoyl)amino]-1,3-octadecanediol,
- 2-(N-stearoylamino)-1,3,4-octadecanetriol, and
- 2-(N-palmitoylamino)-1,3-hexadecanediol.

78. (Previously Presented) The method according to claim 74, wherein said at least one ceramide compound is chosen from bis(N-hydroxyethyl-N-cetyl)malonamide, N-(2-hydroxyethyl)-N-(3-cetyloxy-2-hydroxypropyl)amide of cetylic acid and N-docosanoyl-N-methyl-D-glucamine.

79. (Previously Presented) The method according to claim 74, wherein said at least one liquid fatty alcohol is chosen from lauryl alcohol, isomyristyl alcohol, isostearyl alcohol, isocetyl alcohol, isoarachidyl alcohol, 2-octyldodecanol, 2-butyloctanol and oleyl alcohol.

80. (Previously Presented) The method according to claim 74, wherein said at least one cationic surfactant is chosen from:

A) quaternary ammonium salts of formula (IV):



wherein  $X^-$  of formula (IV) is an anion chosen from halide anions,  $(C_2-C_6)$ alkyl sulfate anions, phosphate anions, alkyl sulfonate anions, alkylaryl sulfonate anions, and anions derived from an organic acid, and

(i)  $R_1$ ,  $R_2$ , and  $R_3$ , of formula (IV), which may be identical or different, are chosen from aromatic groups and from linear and branched aliphatic groups comprising from 1 to 4 carbon atoms, wherein said aliphatic groups optionally comprise at least one heteroatom, and then

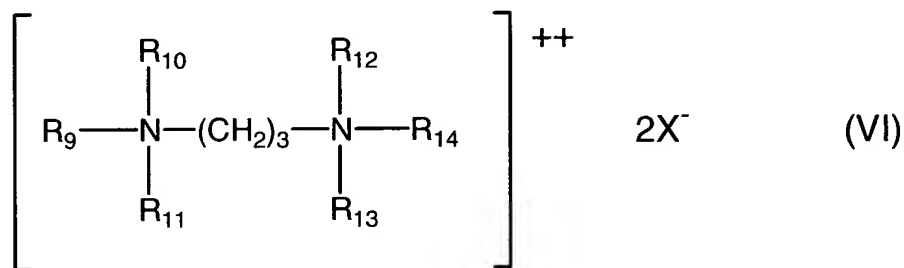
$R_4$  of formula (IV) is chosen from linear and branched alkyl groups comprising from 20 to 30 carbon atoms; or alternatively

(ii)  $R_1$  and  $R_2$ , of formula (IV), which may be identical or different, are chosen from aromatic groups and from linear and branched aliphatic groups comprising

from 1 to 4 carbon atoms, wherein said aliphatic groups optionally comprise at least one heteroatom, and then

$R_3$  and  $R_4$ , of formula (IV), which may be identical or different, are chosen from linear and branched alkyl groups comprising from 12 to 30 carbon atoms, wherein said alkyl groups comprise at least one group chosen from ester groups and amide groups;

- B) - quaternary ammonium salts of imidazolinium;
- C) - quaternary diammonium salts of formula (VI):



wherein

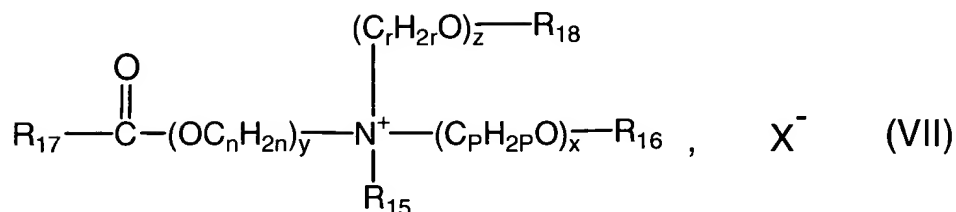
$R_9$  is chosen from aliphatic groups comprising from about 16 to 30 carbon atoms,

$R_{10}$ ,  $R_{11}$ ,  $R_{12}$ ,  $R_{13}$  and  $R_{14}$ , which may be identical or different, are chosen from hydrogen and alkyl groups comprising from 1 to 4 carbon atoms, and

$X^-$  of formula (VI) is an anion chosen from halide anions, acetate anions, phosphate anions, nitrate anions and methyl sulfate anions;

and

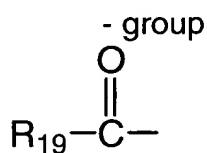
- D) - quaternary ammonium salts, comprising at least one ester functional group, of formula (VII),:



wherein

- R<sub>15</sub> is chosen from C<sub>1</sub>-C<sub>6</sub> alkyl groups, C<sub>1</sub>-C<sub>6</sub> hydroxyalkyl groups, and dihydroxyalkyl groups;

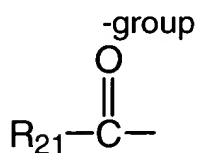
- R<sub>16</sub> is chosen from:



- linear and branched, saturated and unsaturated, C<sub>1</sub>-C<sub>22</sub> hydrocarbon groups R<sub>20</sub>, and

- hydrogen,

- R<sub>18</sub> is chosen from:



- linear and branched, saturated and unsaturated, C<sub>1</sub>-C<sub>6</sub> hydrocarbon groups R<sub>22</sub>, and

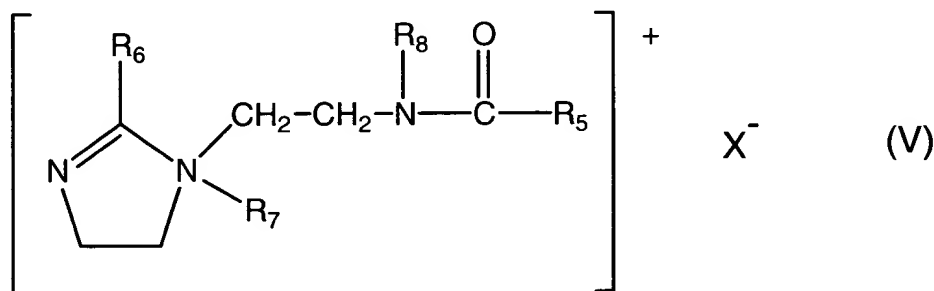
- hydrogen,

- R<sub>17</sub>, R<sub>19</sub> and R<sub>21</sub>, which are identical or different, are each chosen from linear and branched, saturated and unsaturated, C<sub>7</sub>-C<sub>21</sub> hydrocarbon groups;



- n, p and r, of formula (VII), which are identical or different, are each integers having values ranging from 2 to 6;
  - y of formula (VII) is an integer having a value ranging from 1 to 10;
  - x and z, of formula (VII), which are identical or different, are each integers having values ranging from 0 to 10;
  - X<sup>-</sup> of formula (VII) is an anion chosen from organic anions and inorganic anions, and chosen from simple anions and complex anions;
- with the provisos that the sum x + y + z, of formula (VII), has a value ranging from 1 to 15, that when x of formula (VII) has a value of 0, then R<sub>16</sub> denotes R<sub>20</sub>, and that when z of formula (VII) has a value of 0, then R<sub>18</sub> denotes R<sub>22</sub>.

81. (Previously Presented) The method according to claim 80, wherein said at least one cationic surfactant is a quaternary ammonium salt of imidazolinium of formula (V):



wherein R<sub>5</sub> of formula (V) is chosen from alkenyl groups comprising from 8 to 30 carbon atoms and alkyl groups comprising from 8 to 30 carbon atoms, R<sub>6</sub> of formula (V) is chosen from hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl groups, alkenyl groups comprising from 8 to 30

carbon atoms, and alkyl groups comprising from 8 to 30 carbon atoms,  $R_7$  of formula (V) is chosen from  $C_1$ - $C_4$  alkyl groups,  $R_8$  of formula (V) is chosen from hydrogen and  $C_1$ - $C_4$  alkyl groups, and  $X^-$  of formula (V) is an anion chosen from halide anions, phosphate anions, acetate anions, lactate anions, alkyl sulfate anions, alkyl sulfonate anions and alkylaryl sulfonate anions.

82. (Previously Presented) A liquid cosmetic composition, comprising, in a cosmetically acceptable aqueous medium, at least one liquid fatty alcohol, at least one ceramide compound and at least one cationic surfactant, wherein the at least one fatty liquid alcohol is present in an amount ranging from 1.5 % to 10% by weight of the total composition.



**X. Evidence Appendix**

None.

**XI. Related Proceedings Appendix**

None.